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LOSSLESS CODING METHOD FOR DIGITAL SIGNAL IN FLOATING-POINT FORMAT, LOSSLESS DECODING METHOD FOR DIGITAL SIGNAL IN FLOATING-POINT FORMAT, APPARATUS THEREFOR AND PROGRAMS THEREFOR

Related Applications:

5 *This application is a 371 of PCT/JP04/06085, filed April 27th, 2004, which claims priority of Japan application 2003-124011, filed April 28th, 2003.*

TECHNICAL FIELD

The present invention relates to a coding method for compressing a digital sound, music or image signal into codes of smaller information quantity, a corresponding decoding method, a coding apparatus therefor, a

10 decoding apparatus therefor, and programs therefor.

BACKGROUND ART

As a method for compressing sound or image information, there is known a lossless coding method that involves no distortion.

Highly compressive lossless data compression can be achieved by

15 combining a highly compressive lossy coding and a lossless compression of the difference between the reproduced signal and the original signal that appear in the lossy coding.   Such a combined compression method has been proposed in Japanese Patent Application Kokai Publication No. 2001-44847. This method, which is described in detail in the patent literature, will be

20 described briefly below.

In a coder, a frame forming part successively separates digital input signals (referred to also as an input signal sample sequence) into frames, each of which is composed of 1024 input signal samples, for example, and the digital signals are lossily compression-coded on the frame basis.   This

25 coding can be based on any format that is suitable for the input digital signal and can reproduce the original digital input signal with a certain fidelity by decoding.   For example, if the digital input signal is a sound signal, a